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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,934	09/12/2003	Larry V. Streepy JR.	10125.105002	7113
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COBANOGIU, DILEK B				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/660,934

Applicant(s)

STREEPY, LARRY V.

Examiner

DILEK B. COBANOGU

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-854)
Paper No(s)/Mail Date 9/12/2003, 12/21/2007
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. This application is a division of application 09/829461. The priority date of 4/9/2001 has been accepted. Claims 1-30 have been canceled; new claims 31-50 have been added. Therefore claims 31-50 are pending in this application.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 43 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 43 recites "an administrative term further comprises listing one of a MeSH and UMLS CUIT term"; according to the present application, paragraph 0042, these are the pharmacy terms rather than administrative terms. Also, claim 42 recites administrative terms of ICD and CPT. It's not clear if claim 43 should recite administrative terms or pharmacy terms.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 41-50 are rejected under 35 U.S.C. 101 because they are directed to a non-statutory subject matter. According to the new Supreme Court precedent and recent Federal Circuit decisions, the claimed invention should be (1) tied to another statutory class (such as particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. Claims 41 and 46 are method claims and they do not recite any apparatus (such as a computer) in the bodies of the claims, which can be used to implement the claimed steps. Claim 41 recites a method for displaying relationships between medical databases, and the steps of the method does not involve any particular apparatus. Similarly, claim 46 recites a method for displaying relationships between medical databases, and the method steps do not recite any apparatus. In order to be in a statutory class, a method claim should recite an apparatus in the body of the claim, which the steps are performed by that apparatus. Claims 42-45 and 47-50 are rejected under 35 U.S.C. 101 because of the dependency.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 31-50 are rejected under 35 U.S.C. 102(b) as being unpatentable by Dome (U.S. Patent No. 5,325,293).

A. As per claim 31, Dome teaches a method for displaying and creating relationships between different medical sources comprising:

- i. selecting a medical concept displayed on a display device (Dome; col. 5, line 55 to col. 6, line 51);
- ii. displaying another medical concept related to the selected medical concept (Dome; col. 5, line 55 to col. 6, line 51, col. 7, lines 34-53);
- iii. displaying a billing code from a first medical source associated with the selected medical concept (Dome; col. 7, lines 12-33); and
- iv. displaying a medical code from a second medical source that is different from the first medical source and is associated with the selected medical concept (Dome; col. 7, lines 34-53).

B. As per claim 32, Dome teaches the method of Claim 31, wherein the first medical source comprises at least one of International Statistical Classification of Disease and Related Health Problems (ICD) and Physicians' Current Procedural Terminology (CPT) billing codes (Dome; col. 7, lines 34-53).

C. As per claim 34, Dorne teaches the method of Claim 31, further comprising:

- i. receiving a medical concept other than the selected medical concept (Dorne; col. 5, line 55 to col. 6, line 51);
- ii. creating an association between the received medical concept and the selected medical concept (Dorne; col. 5, line 55 to col. 6, line 51); and
- iii. storing the association between the received medical concept and the selected medical concept in memory (Dorne; col. 5, line 55 to col. 6, line 51).

D. As per claim 35, Dorne teaches the method of Claim 34, wherein the received medical concept is a child concept relative to the selected medical concept (Dorne; col. 6, lines 52-66).

E. As per claim 36, Dorne teaches the method of Claim 31, further comprising:

- i. receiving a medical term (Dorne; col. 5, line 55 to col. 6, line 51);
- ii. creating an association between the received medical term and the selected medical concept (Dorne; col. 5, line 55 to col. 6, line 51);
- iii. storing the association between the term and the selected medical concept in memory (Dorne; col. 3, lines 45-50, col. 5, line 55 to col. 6, line 51).

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F. As per claim 40, Dorne teaches the method of Claim 31, further comprising:

- i. receiving an inquiry (Dorne; col. 5, line 55 to col. 6, line 51);
- ii. searching a source comprising the medical concept for the inquiry (Dorne; col. 5, line 55 to col. 6, line 51); and
- iii. displaying one or more medical concepts related to the inquiry (Dorne; col. 5, line 55 to col. 6, line 51).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dorne (U.S. Patent No. 5,325,293) in view of Jacobs et al. (hereinafter Jacobs) (U.S. Patent No. 6,353,817).

A. As per Claim 33, Dorne teaches the method of Claim 31, Dorne fails to expressly teach one of systemized nomenclature medical reference terminology (SNOMED RT), MESH, UMLS CUI, and pharmacy terminology, per se, since it appears that Dorne is more directed to examination procedures (Dorne; col. 4, lines 59-64). However, this feature is well known in the art, as evidenced by Jacobs.

In particular, Jacobs discloses a systemized nomenclature medical reference terminology (SNOMED RT) (Jacobs; col. 1, lines 56-67, col. 11, lines 41-61).

It would have been obvious to one having ordinary skill in the art at the time of the invention to include the aforementioned limitation as disclosed by Jacobs with the motivation of using of this code is essential for inclusion in the medical knowledge base system (Jacobs; col. 1, lines 56-67).

10. Claims 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorne (U.S. Patent No. 5,325,293) in view of Ryan (U.S. Patent No. 5,809,476).

- A. As per claims 37 and 38, Dorne teaches the method of Claim 36, Dorne fails to expressly teach the received medical term comprises one of a synonym, consumer term, grammatical variant, abbreviation, misspelling, truncation, phrase, and a code modifier and storing the received medical term in a glossary comprising terms. However, this feature is well known in the art, as evidenced by Ryan.
- In particular, Ryan discloses the received medical term comprising a consumer term and storing the received medical term in a glossary comprising terms (Ryan; abstract, col. 3, lines 4-15).

It would have been obvious to one having ordinary skill in the art at the time of the invention to include the aforementioned limitation as disclosed by Ryan with the motivation of correcting and supplementing the original information (Ryan; abstract).

11. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dorne (U.S. Patent No. 5,325,293) in view of Hatzis et al. (hereinafter Hatzis) (U.S. Patent Publication No. 2002/0091680 A1).

A. As per Claim 39, Dorne teaches the method of Claim 31.

Dorne fails to expressly teach receiving input defining a new taxonomy, the taxonomy comprising a hierarchy of medical information; and storing the input in memory. However, this feature is well known in the art, as evidenced by Ryan. In particular, Ryan discloses the received medical term comprising a consumer term and storing the received medical term in a glossary comprising terms (Ryan; abstract, col. 3, lines 4-15).

It would have been obvious to one having ordinary skill in the art at the time of the invention to include the aforementioned limitation as disclosed by Ryan with the motivation of correcting and supplementing the original information (Ryan; abstract).

12. Claims 41-50 rejected under 35 U.S.C. 103(a) as being unpatentable over Dorne (U.S. Patent No. 5,325,293) in view of "Representing thoughts, words and things in the UMLS" by Keith Campbell, Diane Oliver, Kent Spackman and Edward Shortliffe; Journal of American Medical Informatics Association, volume 5, number 5, pages 421-431, Sep/Oct 1998 (hereinafter Campbell).

A. As per claim 41, Dorne teaches a method for displaying relationships between medical databases comprising

- i. receiving a selection of a first medical concept (Dorne; col. 5, line 55 to col. 6, line 51);
- ii. in response to the selection, listing a second medical concept associated with the first medical concept (Dorne; col. 5, line 55 to col. 6, line 51);
- iii. listing an administrative term associated with the first medical concept (Dorne; col. 7, lines 12-24); and
- iv. listing a pharmacy term associated with the first medical concept.

Dorne fails to expressly teach a pharmacy term per se, Dorne is more directed to examination procedures (Dorne; col. 4, lines 59-64). However, this feature is well known in the art, as evidenced by Campbell.

In particular, Campbell discloses a pharmacy term; such as Mesh and UMLS CUIT (Campbell; abstract, page 425, paragraph 3 to page 426, paragraph 1, and pages 427-428).

It would have been obvious to one having ordinary skill in the art at the time of the invention to include the aforementioned limitation as disclosed by Campbell with the motivation of displaying the medicine associating with the first concept.

B. As per claim 42, Dorne teaches the method of Claim 41, wherein listing an administrative term further comprises listing one of an international statistical classification of disease and related health problems (ICD) term and a Physician's Current Procedural Terminology (CPT) term (Dorne; col. 5, line 55 to col. 6, line 51).

C. As per claim 43, Dorne teaches the method of Claim 41. The obviousness of modifying the teaching of Dorne to include a pharmacy term; such as Mesh and UMLS CUIT (as taught by Campbell) is as addressed above in the rejection of claim 1 and incorporated herein.

D. As per claim 43, Dorne teaches the method of Claim 41, further comprising displaying the first and second medical concepts in a first window and displaying the administrative term and pharmacy term in a second window different from the first window (Dorne; col. 7, lines 12-24).

E. As per claim 44, Dorne teaches the method of Claim 41, further comprising displaying the first and second medical concepts according to a graphical model and displaying the administrative term and pharmacy term according to a text listing (Dorne; col. 7, lines 12-24).

- F. As per claim 45, Dorne teaches a method for displaying relationships between medical databases comprising:
- i. receiving a selection of a first medical concept (Dorne; col. 5, line 55 to col. 6, line 51);
 - ii. displaying a first medical concept and a second medical concept according to a spatial graphical relationship (Dorne; col. 5, line 55 to col. 6, line 51); and
 - iii. displaying a first code and a second code associated with the first medical concept in a text list (Dorne; col. 5, line 55 to col. 6, line 51, col. 7, lines 12-24).
- G. As per claim 47, Dorne teaches the method of Claim 46, wherein displaying the first code further comprises displaying one of an international statistical classification of disease and related health problem (ICD) code and a Physician's Current Procedural Term (CPT) code (Dorne; col. 5, line 55 to col. 6, line 51).
- H. As per claim 48, Dorne teaches the method of Claim 46.
- The obviousness of modifying the teaching of Dorne to include a pharmacy term; such as Mesh and UMLS CUIT (as taught by Campbell) is as addressed above in the rejection of claim 1 and incorporated herein.
- I. As per claim 49, Dorne teaches the method of Claim 46, wherein displaying the first medical concept and a second medical concept further comprises displaying the first medical concept as a first text string and

displaying the second medical concept as a second text string connected to the first text string by a graphical element (Dorne; col. 5, line 55 to col. 6, line 51, col. 7, lines 12-24).

J. As per claim 50, Dorne teaches the method of Claim 46, wherein displaying the first code and the second code further comprises displaying the first code and the second code in a bounded region that is separate from the first and second medical concepts (Dorne; col. 5, line 55 to col. 6, line 51, col. 7, lines 12-24).

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited but not used prior art teach Graphic data processor 4780831 A, Apparatus and method for improved estimation of health resource consumption through use of diagnostic and/or procedure grouping and severity of illness indicators 5018067 A, Medical claims integration and data analysis system 5970463 A, System and method for medical language extraction and encoding 6055494 A, System and method for providing an object-oriented interface to a relational database 6490581 B1, System and user interface for use in providing medical information and health care delivery support 6551243 B2, Method and system for medical patient data analysis 6611846 B1, Automatically assigning medical codes using natural language processing 6915254 B1, Device for automating billing reimbursement 7110955 B1, Unitary language for problem solving resources for knowledge based services 7222066 B1.

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DILEK B. COBANOGLU whose telephone number is (571)272-8295. The examiner can normally be reached on 8-4:30.

15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher L. Gilligan can be reached on 571-272-6770. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. B. C./
Examiner, Art Unit 3626
7/30/2008

/Robert Morgan/
Primary Examiner, Art Unit 3626